

## PMComanchePeakPEm Resource

---

**From:** Monarque, Stephen  
**Sent:** Monday, November 15, 2010 12:36 PM  
**To:** John.Only@luminant.com; Donald.Woodlan@luminant.com; cp34-rai-luminant@mnes-us.com; Diane Yeager; Eric.Evans@luminant.com; joseph tapia; Kazuya Hayashi; Matthew.Weeks@luminant.com; MNES RAI mailbox; Russ Bywater  
**Cc:** ComanchePeakCOL Resource; Smith, Rich; Roy, Tarun  
**Subject:** Comanche Peak RCOL Chapter 2, Section 2.4 - RAI Number 188  
**Attachments:** RAI 5225 (RAI 188).docx

The NRC staff has identified that additional information is needed to continue its review of the combined license application. The NRC staff's request for additional information (RAI) is contained in the attachment. Luminant is requested to inform the NRC staff if a conference call is needed.

The response to this RAI is due within **35** calendar days of November 15, 2010.

Note: If changes are needed to the safety analysis report, the NRC staff requests that the RAI response include the proposed changes.

thanks,

Stephen Monarque  
U. S. Nuclear Regulatory Commission  
NRO/DNRL/NMIP  
301-415-1544

**Hearing Identifier:** ComanchePeak\_COL\_Public  
**Email Number:** 1158

**Mail Envelope Properties** (9C2386A0C0BC584684916F7A0482B6CA1C14C98B6E)

**Subject:** Comanche Peak RCOL Chapter 2, Section 2.4 - RAI Number 188  
**Sent Date:** 11/15/2010 12:36:22 PM  
**Received Date:** 11/15/2010 12:36:22 PM  
**From:** Monarque, Stephen

**Created By:** Stephen.Monarque@nrc.gov

**Recipients:**

"ComanchePeakCOL Resource" <ComanchePeakCOL.Resource@nrc.gov>

Tracking Status: None

"Smith, Rich" <Rich.Smith@nrc.gov>

Tracking Status: None

"Roy, Tarun" <Tarun.Roy@nrc.gov>

Tracking Status: None

"John.Only@luminant.com" <John.Only@luminant.com>

Tracking Status: None

"Donald.Woodlan@luminant.com" <Donald.Woodlan@luminant.com>

Tracking Status: None

"cp34-rai-luminant@mnes-us.com" <cp34-rai-luminant@mnes-us.com>

Tracking Status: None

"Diane Yeager" <diane\_yeager@mnes-us.com>

Tracking Status: None

"Eric.Evans@luminant.com" <Eric.Evans@luminant.com>

Tracking Status: None

"joseph tapia" <joseph\_tapia@mnes-us.com>

Tracking Status: None

"Kazuya Hayashi" <kazuya\_hayashi@mnes-us.com>

Tracking Status: None

"Matthew.Weeks@luminant.com" <Matthew.Weeks@luminant.com>

Tracking Status: None

"MNES RAI mailbox" <cp34-rai@mnes-us.com>

Tracking Status: None

"Russ Bywater" <russell\_bywater@mnes-us.com>

Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

| <b>Files</b>            | <b>Size</b> | <b>Date &amp; Time</b> |
|-------------------------|-------------|------------------------|
| MESSAGE                 | 647         | 11/15/2010 12:36:22 PM |
| RAI 5225 (RAI 188).docx |             | 20023                  |

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

Request for Additional Information (RAI) No. 5225, COLA Revision 1

RAI Number 188

11/15/2010

Comanche Peak Units 3 and 4  
Luminant Generation Company, LLC.  
Docket No. 52-034 and 52-035

SRP Section: 02.04.03 - Probable Maximum Flood (PMF) on Streams and Rivers  
Application Section: FSAR Section 2.4.3

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.03-12

NUREG-0800, Standard Review Plan (SRP), Section 2.4.3, 'Probable Maximum Flood (PMF) on Streams and Rivers,' establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations. In response to supplemental RAIs 4308, 4309, 4310, and 4311 the Applicant provided responses dated July 16, 2010 which discussed estimation of watershed flooding as a result of flood causing hydrological mechanisms, including calculation package TXUT-00-FSAR 2.4.3-CALC-012 REV. 2. While performing the review and comparing the HEC-HMS basin layout of Figure 7-12 of Revision 2 to the original HEC-HMS basin layout of Figure 7-4 of TXUT-00-FSAR 2.4.3-CALC-012 Revision 1 provided by the Applicant in August 2009, it became clear that the Applicant revised the sub-basins network topology used in the HEC-HMS modeling to determine runoff to Squaw Creek Reservoir and routing to Brazos-Paluxy confluence. The NRC staff needs to confirm that the actual HEC-HMS and HEC-RAS computer modeling input/setup files are consistent with the results cited in TXUT-001-FSAR-2.4.3-CALC-012 Rev 2.

As such, the applicant is requested to submit the files for review. The NRC staff also requests clarification of why, as referenced in Section 2.0 of TXUT-00-FSAR 2.4.3-CALC-012 REV. 2, different flow rates are used in HEC-HMS and HEC-RAS analysis and determination of the backwater elevation at Squaw Creek Dam tailwater. The HEC-HMS outflow from SCR is 206,000 cfs, whereas the HEC-RAS input is specified as a "backwater flow" of 100.440 cfs. Clarify the physical significance of these two flow rates and their relationship.